



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,079	01/31/2002	Dennis Stamires	ACH2850US	2467

7590 02/25/2004  
LOUIS A. MORRIS  
AKZO NOBEL INC.  
7 LIVINGSTONE AVENUE  
DOBBS FERRY, NY 10522-3408

EXAMINER
----------

MEDINA SANABRIA, MARIBEL

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/066,079	STAMIRET ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Maribel Medina	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/13/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

#### **Claim Objections**

1. Claim 13 is objected to because of the following informalities: in the first line of the claim "an" should be change to --a--. Appropriate correction is required.

#### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 13, 14, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/41196 (Stamires et al).

In regards to claims 1-6, Stamires et al disclose a composition comprising a hydrated magnesium-aluminum hydroxy carboxylate displaying a reflection in the powder X-ray diffraction pattern in the range of 5 to 15 Å. (See page 7, line 27; example 7; and the figures).

The composition also includes an aluminum source such as aluminum oxides and hydrates; pseudoboehmite; and aluminum salts (See page 11, lines 1-25). The carboxylate is acetate or formate (See page 11, line 26- page 12, line 14). The magnesium to aluminum ratio can vary from 1 to 10 (See page 14, lines 16-20).

In regards to claim 13, Stamires et al disclose the preparation of a Mg-Al solid solution wherein the composition is calcined at a temperature in the range of 300 to 1200°C (See page 9, lines 25-28).

In regards to claim 14, Stamires et al disclose the process of making an anionic clay.

In regards to claim 15, Stamires et al disclose a Mg-Al solid solution (See page 1, lines 7). In regards to claim 17, Stamires et al disclose a catalyst composition comprising the instantly claimed composition (See page 9, lines 17-20). No difference is seen between the instantly claimed invention and Stamires et al disclosure.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15, 16, and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stamires et al.

Stamires et al disclose the Mg-Al solid solution of claim 15; the anionic clay of claim 14, and the catalyst composition of claim 17.

In the event any differences can be shown for the product of the product by process claims 15, 16 and 17, as opposed to the products taught by Stamires et al, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

6. Claims 7-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stamires et al.

Art Unit: 1754

Stamires et al apply herein as above in regards to claim 7, Stamires et al disclose a process for the preparation of the instantly claimed composition wherein a mixture of an aluminum source and a magnesium carboxylate are aged, however fail to disclose the pH range at which the composition is aged.

A pH range in the range of 3.5-6.5 would have been inherently present in the process of Stamires et al once an organic or inorganic acid is used to control the pH. Note that Stamires et al disclose in page 14, lines 1-5 the use of an inorganic or organic acid to control the pH. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Alternatively, it is well known and recognized in the art that the pH is "result effective variable", therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined by experimentation the suitable pH range to age the composition of Stamires et al, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regards to claim 8, Stamires et al disclose that the magnesium carboxylate is magnesium acetate or formate (See page 11, lines 26-30 and page 12, lines 1-6). In regards to claim 9, Stamires et al disclose that the aluminum source can be an aluminum salt, pseudoboehmite among others (See page 11, lines 15-25). In regards to claims 10-12, Stamires et al disclose that the process (aging) is carried under hydrothermal conditions; in two separate steps, one under thermal and one under hydrothermal conditions; and in a continuous mode (See page 13, lines 17-30 and page 12, line 19).

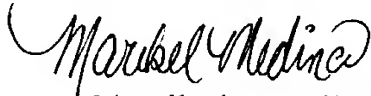
Art Unit: 1754

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maribel Medina whose telephone number is (571) 272-1355. The examiner can normally be reached on Monday through Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Maribel Medina  
Examiner  
Art Unit 1754